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ABSTRACT

A practicum project was conducted to develop a method to enhance the knowledge base of targeted adult cancer patients entering into a treatment plan that included chemotherapy. The educational component necessary for informed consent by the patient had not been consistent; therefore, a videotape was developed containing general information common to all drugs used in the treatment of cancer. An addendum was developed and individualized instruction given by an oncology nurse to each of the eight participating patients, providing specific information about individual drugs. Success was measured by the accurate completion of an informational survey administered to the targeted population prior to and after the instruction. A further measure was obtained from the completion of the nurse survey sheet by 9 of 12 professional nurses responsible for the patient instruction. Results indicated that patient learning was achieved using the generic tape followed by the nurse-patient interaction. Results also indicated increased job satisfaction for the oncology nurses providing the instruction. (Appendixes include results of the nurse survey, the patient questionnaire, and data on information retention using the tape as an adjunct to learning. (Contains 34 references.) (Author/KC)

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DEVELOPMENT OF A VIDEO TAPE TEACHING MODULE TO FACILITATE THE PATIENT'S UNDERSTANDING OF CHEMOTHERAPY

by

GERTRUDE W. VERNOT

A Practicum Report
submitted to the Faculty of the Center for the Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

April/1992

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Abstract

Development of a Video Tape Teaching Module to Facilitate the Patient's Understanding of Chemotherapy
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The intent of the practicum was to enhance the knowledge base of the targeted adult cancer patient entering into a treatment plan that includes the reception of chemotherapy. The educational component necessary for informed consent by the patient was not consistent. A videotape was developed containing general information common to all drugs utilized in the treatment of cancer. An addendum was developed and individualized instruction given by an oncology nurse to each patient which contained specific information about individual drugs. The writer measured success by the accurate completion of an informational survey administered to the targeted population prior to and after the teaching was completed. A further measure was obtained from the completion of the nurse survey sheet by the professional nurses responsible for the patient instruction. Results indicated patient learning was achieved utilizing the generic tape followed by the 1:1 nurse patient interaction. Results also indicated increased job satisfaction for the oncology nurses providing the instruction. Appendices included results of the nurse survey, the patient questionnaire, and information retention utilizing the tape as an adjunct to learning.

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Practicum Title Development of a Video Tape Teaching Module to Facilitate the Patient's Understanding of Chemotherapy

Student's Name Gertrude W. Vernot

Program Site _____ Date _____

Observer's Name Swilley, Mildred K. Mildred K. Swilley, RN
(please print---------and sign)

Observer's position Director of Medical and Oncology Nursing Phone # 681-5304

Observer's comment on impact of the project (handwritten): _____

The project reflects a positive impact on the quality and continuity of teaching for the patients & timesaver for oncology nurses.

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Chapter I

Purpose

The practicum was being developed for use in a regional medical center located in north Florida in a county which, according to the Chamber of Commerce, has a population of 198,795 as of 1990. The facility is located within the boundaries of a city. The area's planning department attributes 69 percent of the entire county population to the city, while the geographical limits encompasses 59 of the 671 square miles of the same area. The county Chamber of Commerce stated the distribution of population is 73 percent White, 24 percent Black and 3 percent other. A profile of the county's population, according to the planning department, reveals a composite that is relatively young, affluent and well educated. The 1990 census data showed that the county's median age is 25.9, the state's second youngest community. Additionally, the area's population over 65 years of age is just 6.6 percent, well below the state's average of 17.3 percent. The median income of the county is $24,426 compared with the state's $17,316.

Beyond the immediate geographic area, the medical center serves surrounding counties approximately 100 miles in each direction. The county in which the target center resides is centrally located between the Gulf of Mexico and the state's northern border. The area serviced includes counties of the home state as well as southern areas of the northern neighbor. The city in which the medical facility resides is the largest one in the entire geographically described area. The city has experienced a growth rate of 54 percent since 1980, according to the planning commission. Much of the population increase can be attributed to direct annexation of areas from the county. The major employer of the geographic area is state and municipal government, accounting for 42 percent of all employment, which lends a stabilizing force to the economy. The unemployment rate for the area is 4.1 percent compared with the state's 7.2 percent and a national figure of 6.4 percent. The figures are based on information obtained from the Florida Department of Labor and Employment Security, United States Bureau of Labor Statistics,as of October 1991. The third largest source of employment in the county is service occupations, comprising 20.4 percent

(County Planning Department, 1989). The target medical center is the largest private employer in the area and is presently one of two acute care facilities located in the area. The total number of acute care beds in the county is 871, according to the county profile. Of these, the target medical center provides close to 82 percent of the beds. The target hospital was founded in 1948, as a city supported facility of 150 beds according to the foundation's records.

The number of beds a hospital may have is determined by a certificate of need (CON), which is applied for by an institution and granted by state department of Health and Rehabilitation Services (HRS). Any addition, changes, et cetera, in allocated number must be approved by HRS prior to implementing the change. The hospital's growth over the last 40 years has been exponential, as has the change in services provided (Appendix A:66). The institution is a private nonprofit one with over 700 available beds and a number of supportive arms and affiliated hospitals in official association. Fees charged must be within the guidelines of the Hospital Cost Containment Board. Financial reimbursements from third party payers follow a standard fee schedule as set down by the payer.

The sources include private health insurance companies, Medicare, Medicaid and Health Maintenance Organizations. Frequently, individuals are billed for the percentage not reimbursed by the third party. Any individuals not having a payment source are responsible for all costs incurred and whenever the need is present the individual will be assured medical treatment as "medically indigent". Thus, no individual may be denied medical care because of economic consideration.

The second acute care facility of the area is a general service private for profit hospital, one of many belonging to one of the largest corporations in the country. Due to the smaller size, the facility provides services on a much smaller scale than the regional medical center.

A third facility in the target county is a rehabilitation hospital containing 40 beds. The opening four years ago afforded the community expertise on an intensified level for the patient requiring rehabilitation caused by trauma, whether accidental or acute medical onset. The institution is an arm of a national group of centers geared totally to the rehabilitation of the nerve destructed individual.

Surrounding counties have small community hospitals to meet the basic needs of the specific population. The largest has a CON for 54 beds. However, services provided by the smaller hospitals are limited and the transfer to the target medical center is often indicated. Such transfers are accomplished in an organized planned manner of physician referral. Thus, many of the patients in the target medical center may arrive prior to a definitive diagnosis of a particular disease entity. The referring physician assumes the responsibility of seeking out the appropriate medical specialist in the home community of the target medical center when an individual presents with specific symtoms. The medical center of the practicum includes a staff of 264 physicians, encompassing most major specialities, according to the annual cancer report of 1988.

Standard protocols utilized in the community for treating cancer include surgery, radiation therapy and chemotherapy. Research and medical expertise determine how a specific cancer is treated. The advances over the past 25 years have greatly enhanced treatment options and the outcomes of each. The

specific population targeted in the practicum are individuals having been diagnosed with a cancer who will undergo a treatment protocol that includes chemotherapy.

The cancer program at the target medical center was established in 1956, and is the oldest program in the state with uninterrupted accreditation by the American College of Surgeons. In 1932, the American Cancer Society requested leadership in setting guidelines for cancer care from the American College of Surgeons. The guidelines were first published in 1953. Today, the target institution's cancer services include a full range of case finding, diagnostics, treatment and management facilities which qualifies the program as a site for a "Community Hospital Comprehensive Cancer Program" as designated by the American College of Surgeons.

The target institution has a dedicated cancer unit consisting of 34 beds and an outpatient component. The population is adult oncology patients requiring treatment for the disease. The mix of patients varies from the newly diagnosed, to individuals undergoing active treatment, to individuals requiring supportive care during disease exacerbation, to persons who have

had negative reactions to treatment protocols and are thus considered terminal.

The unit is managed by a nurse manager, or more commonly dubbed, a head nurse. As that individual, the author brings a broad background of experience to the position. The author holds bachelor of science degrees in psychology and nursing with minor fields of study concentrated in biology and religion. As a young adult, the author taught and established religious education programs on military bases, experience that opened the door, in the late 1960's, to being specially trained to teach adults and children a new way to read (the Evelyn Wood Reading Dynamic method). Much personal insight and discipline was gained which led to pursuing a nursing degree; the degree was attained in 1977. Upon graduation, the author was employed by the target institution as a staff nurse on the oncology unit. Two years later, promotion to head nurse was achieved. Much growth and change has occurred during the 11 years, in regard to cancer care in general, as well as specifically at the target institution, which has been a forerunner in developing a philosophy that is all inclusive. The quality of patient care delivered is of high

standard, which has afforded the unit a fine reputation within the institution as well as in the community at large.

As the nurse manager of the oncology unit at the target acute care facility, the realm of responsibility includes ensuring appropriate information concerning disease processes and treatments be disseminated to the patient. Accepted modalities employed in the treatment of cancer are intricate and must be preceded by overt patient consent to participate in such protocols. The information is incorporated in the plan of care developed by the professional nurse. The oncology nurse is a professional who has completed an approved educational program for registered nurses, and who also embraces as a subspecialty, the caring for individuals who have cancer. Specific educational requirements may vary from workplace to workplace. Professional nurses choosing to work on the cancer unit at the target center are required to participate in a six hour course specifically aimed at the treatment modality, chemotherapy. In addition, a minimum of six hours per year of continuing education seminars directly related to the care of the cancer patient are required.

An up-to-date library is provided on the unit to assist with the professional nurse's plan of care. Participation in the Oncology Nurses Society (ONS) is strongly recommended and each nurse is encouraged to seek professional certification from the ONS as an Oncology Certified Nurse (OCN). In addition, the professional oncology nurse at the target facility will become a community resource for the general population and provide information concerning screening, prevention and treatment of cancer.

The shortage of professional nurses is a national problem as stated by the National Commission on Nursing (Health and Human Services, 1988). The findings of the commission concluded that the current nurse shortage is a result of a rapidly increasing demand for registered nurses (RN) for various reasons. One of the reasons addressed is the increased complexity in patient care. The recommendations include sufficient support services for nurses, utilization of the most appropriate mix of nursing personnel, adoption of automated information technologies to increase the RN's productivity, and improvement in the internal management of nurse resources within health care organizations.

The targeted oncology unit has surely been affected by the acute shortage of professional nurses. Cancer research has resulted in the existence of treatments for many specific cancers that significantly improve the overall survival rate. In 1989, the American Cancer Society reported just over 50 percent survival as compared with 25 percent just twelve years prior. The advancements in treatment processes directly affect the staffing requirements on the oncology unit; patients are receiving extremely complex chemotherapy protocols that require extensive teaching prior to administration. The protocols are much more intricately designed resulting in a longer span of time for administration. The professional nurse is responsible for the teaching prior to and the administration of each specific chemotherapeutic protocol. The individuals presenting to the nurse on the target oncology unit will undergo chemotherapy as one of, or, the only treatment of choice. The intricacies of the particular treatment now demand a minimum of 45 minutes for initial teaching and often an hour or more for actual administration. The actual time required is almost double the time required 10 years ago. Another area of consideration is that

of early detection of disease. Diagnostic techniques have been so refined over the past years that many cancers are now diagnosed at a much earlier state of growth, increasing the total number of cancer patients presenting for treatment in general.

With the significant increase in survival rates, the cancer patient now often realizes the predicament of having to deal with intermittent exacerbations of disease, accompanying illnesses possibly related to the treatment, or with separate disease entities, all requiring acute intermittent hospitalizations; thus, there are more cancer patients who are sicker and in greater need of nursing care. All of the above at a time when the availability of professional nurses is at the lowest ebb in many years. Thus, the importance of looking at the "how" the care required is given becomes paramount. The goal of the project was to address the need of the teaching component of chemotherapy as a primary treatment for cancer.

Chemotherapy protocols relevant as a treatment for cancer in the late 1980's are intricately more complex than those of earlier decades. The advances of research make available today a number of

antineoplastic agents and a vast array of protocols for administration. Advanced protocols require the expertise of a specially trained individual to administer the drugs in a safe environment.

The patient designated to receive pharmaceutical agents as the treatment of choice is required to give informed consent prior to initiating treatment. In order to give consent, the patient must understand the treatment ordered and the possible side effects of the specific medicines to be administered. The responsibility to instruct the patient and insure the knowledge base is adequate for granting informed consent becomes the responsibility of the professional nurse.

The teaching component of chemotherapy administration is one that has expanded as the research has given improved protocols. Just a decade ago, the average time needed for adequate initial teaching was 15 to 20 minutes, as reported by Fiebelkorn (1990), an oncology nurse, interviewed at the target institution. The time required for teaching has at least doubled in the past five years as reported by another oncology nurse, Swain (1990). The educational component of chemotherapy as a treatment for cancer

is compounded by the fact that there are a larger total number of patients admitted to the oncology floor at the target medical center. The average daily census in 1986 was 26 as compared with that of 1989 of 32 inpatients (Appendix B:68). The acuity level of these patients has also increased exponentially since 1986 (Appendix B:68). Acuity level measures the amount of care needed by a specific individual. The institution of the practicum has utilized one of the computer assisted programs for such measuring, called Medicus. The tool is designed to give standard guidelines for staffing acute care areas according to the actual needs of the patients admitted on the specific unit. The rising acuity level on the target unit herein referred reflects in part the increased educational needs of the patients.

The complexity in patient care is embellished in a time frame that sees a decline in the resources needed to administer certain facets of care. The shortage of professional nurses is an actuality. The target institution reported greater than 50 vacant RN positions at any given time in 1989, reflecting the national problem as discussed by the National Commission on Nursing (Health and Human Services,

1988). The cancer unit of the target center decidedly changed the way care is delivered in order to better meet the needs of the patient. The possibility now exists for comparing the recommended staffing patterns with the actual resources available over the past four years (Appendix C:70). Such information reflects the effects of the nursing shortage on the specific nursing unit.

The necessity existed to devise a teaching methodology that will meet the patient's need for informed consent prior to chemotherapy administration. The tool had to be developed to assist the nurse in the introductory education required prior to initiating a chemotherapy protocol. The availability of professional nurses to provide the teaching has vastly diminished. The research advances resulting in more intricate and successful treatment regimens demands an increased educational component prior to the initial treatment. The oncology unit at the target institution has a staff that includes 33 percent registered nurses. The acuity level, according to Medicus (1989), gives staffing information that stated the complement of professional nurses should be at least 55 percent to meet the specific needs of the oncology patients

on the target unit. There exists a difference of 22 percent in available resources to accomplish the required chemotherapy teaching. The decreased resource of the professional nurse in a time of greater need results in yet another need for a development of another method of information presentation. The practicum here presented sought to solve the problem of communicating information to cancer patients prior to initiating chemotherapy as a treatment for cancer.

The purpose of the practicum was to develop teaching modules to be utilized as the core communication tool prior to one's initial chemotherapy treatment. The modules will be generic presentations that will hopefully be understood by a diverse population. Any teaching presented must be understood. The intent of the practicum development was to insure comprehension. The target population was projected to be 12 cancer patients at the target medical center and involved four nurses serving the cancer unit.

After two months of implementing the Vernot Teaching Modules, at least 75 percent of the patients receiving the instruction should demonstrate understanding of the treatment called chemotherapy,

evidenced by successful completion of a 10 question survey with a minimum score of 70 percent (Appendix D:72).

In addition, after two months of participating in the Vernot Teaching Modules, 100 percent of the professional nurses administering the initial chemotherapy should demonstrate time saved by completion of a task survey with a minimum score of 80 percent (Appendix E:76). The result of time saved will benefit the nurse and the population served. The end product will be an improvement of care delivered in a safe and competent manner.

A third result should demonstrate an attitude change in 100 percent of the nurses administering chemotherapy. The change in attitude will be directed toward the feeling of having achieved a satisfactory degree of teaching prior to the actual administration of chemotherapy to the 12 patients. The result will be demonstrated by analysis of the Professional Nurse Task Survey (Appendix E:76). A positive correlation should be achieved with a minimum score of 75 percent on the survey after two months of participating in the Vernot Teaching Modules.

The benefit obtained from the implementation of the Vernot Teaching Modules should be felt on a variety of levels. The patient should directly benefit by having a tutorial presentation on a level of comprehension that promotes understanding resulting in a better ability to give informed consent. The nurse will have a knowledge base that includes the basic information needed for communication prior to treatment being given in a consistent manner. The specific information taught by the nurse will be prepared to enhance the Modules and assure the particulars of each regimen are communicated. The community at large should benefit from the establishment of a program that allows for comprehensive teaching with the learner's ability to understand as a prime component.

Chapter II

Research and Solution Strategy

The role of chemotherapy as a treatment for cancer has been growing in importance over the last 15 years. Research expertise has resulted in protocols that employ a number of different drugs, given in a variety of ways, having a hopefully significant effect on a specific cancer. As the demand for nurses to administer the protocols increases, the resources available for such employment have not, as noted by the National Commission on Nursing (Health and Human Services, 1988). The expertise required to administer antineoplastic drugs is one of specialty. The ONS has developed criteria based performance levels for the safe administration of chemotherapy (ONS, 1988). The scope of the ONS guidelines for chemotherapy administration is all inclusive and becomes the basis for the professional nurse education standards developed by the institution of the practicum. The educational preparation is a six hour classroom experience followed by a "one to one hands on" internship in the actual administration of the chemotherapeutic agents. The patient teaching required

prior to the initial treatment is included in the learning modules set up by the target institution. The intricacies of the combinations of drugs administered must be conveyed to the patient in a manner that results in sufficient comprehension on the patient's part for giving implied consent for treatment. The antineoplastic drugs employed as standard treatments have some commonalities enabling generalized teaching components as a portion of the entire learning tool. In addition, drug specific information must be included for the patient to be able to develop an understanding of the treatment plan. The tasks to be included in patient education are incorporated utilizing as a guide the ONS publication: "Outcome Standards in Patient Education" (1982).

Chemotherapy as a treatment for cancer has been available for many years. However, prior to the mid 1970's, any teaching about the treatment was done by the physician, specifically the medical oncologist, as was the administration of such protocols. The physician's resource for drug specific information was often the Physicians Desk Reference (PDR) which is updated annually, and isolated articles describing

research done utilizing various drugs. The physician's ability to convey information to the patient on a level of individual comprehension sufficient for learning has often been questioned. Bush's research (1983) noted that patients may learn more from a nurse than a physician because of the way in which information is presented. The first medical oncologist at the target institution, MacDonald (1990), quickly realized the phenomenon and actively involved the professional nurse in the criteria for adequate education of the person with cancer. Thus, in 1976, the nurse became the primary teacher for chemotherapy information at the institution. Such a responsibility is in accordance with the scope of practice, as set down by a regulatory agency for the particular category of healthcare worker (Florida Board of Nursing, 1989). The mode of communication for chemotherapy drug information at the target institution has traditionally been accomplished on a one to one basis. The general information presented has been supplemented by a publication entitled "Chemotherapy and You" (1986) by the National Cancer Institute (NCI). The booklet is circulated to requesting organizations at no cost, thus, becoming a very appropriate source for drug

specific information. The nurse has traditionally presented general information and then reviewed specifics from the NCI publication which is updated frequently by the NCI. The time allotted for appropriate teaching has about doubled in past couple of years due to comprehensiveness of information needed to be shared. The nurses at the target institution have expressed need for increased teaching time, a commodity not always achievable due to workload and resources available to accomplish daily tasks (Health and Human Services, 1988). The volume of chemotherapy treatments has grown over the past few years (Appendix F:79). In addition, the complexity of the protocols has required expertise and much individualized administration time. The end result of such chemotherapy advancement is a treatment regimen that is involved both from the aspect of patient preparation as well as patient reception.

Consultation with professionals in nearby institutions suggested a similar situation. Lentz (1990), RN of a hospital within two hours of the target institution, was recently interviewed. As the nurse manager of a 36 bed cancer unit, frustration was expressed with the method now employed for chemotherapy

teaching. The teaching is presently being done on a 1:1 basis, utilizing a patient teaching tool developed in house, and the NCI booklet on chemotherapy. The initial teaching time allotted is approximately 30 to 40 minutes with reinforcement the following day. Lentz expressed frustration felt by the staff at the site; the workload often leaves the nurse feeling that not all the information is presented adequately. Lentz further stated that the plan exists to investigate alternative methods of delivering the information.

Another institution shared methods of teaching with the author. The location is within an hour of the target institution in a neighboring state. The facility has an outpatient clinic for chemotherapy administration. According to Bruijn (1990), the director of the clinic, all teaching is currently being done on a 1:1 nurse to patient basis modified according to the individual patient's ability to understand. Such a strategy has been the generalized core of chemotherapy teaching since the inception of such processes (ONS, 1982). The clinic is associated with a hospital and has three professional nurses employed. The small number of individuals doing the

teaching lends to quality control according to the director. All inpatients receive initial chemotherapy teaching from a clinic based RN. The time allotted for this is anywhere from 45 to 75 minutes, with follow-up being done on an outpatient basis. The director further relayed that the number of patients served, is done so, comfortably, at the present time of program development. The only constraint of the program at present is the scope of patient comprehension. The population is extremely rural and often lacking in skills for in depth comprehension of listening to intricate information. As the facility grows, the director stated that different approaches to teaching may have to be considered.

The cancer program at the target institution of the practicum has grown significantly in the past eight years. The number of new cancer diagnoses is approximately 100 per month as compared with a number between 50 and 60 in 1982, as recorded in the 1989 annual report of the target institution's tumor registry. The individual nurses doing the teaching prior to initial chemotherapy administration have increased in number from four to nine since 1982. The core content is presented to the nurses at time

of employment and updated annually at time of tenure evaluation. However, no consistent method of item information shared is monitored. Thus, the actual quantity and quality of the items being taught is not consistent. The increased number of individuals available to teach the information makes it possible for a wider variety of items actually addressed in the initial interaction of nurse-patient. Pendleton (1982) presented information concerning ability to remember instruction as a prerequisite for understanding and comprehension. The items presented must be remembered.

In addition, Gorman (1974) stated there are two levels on which communication takes place: "content level" and "process level". The terms could be stated another way, as "topic level" (what is being discussed) and "reaction level" (what is being felt). People have knowledge of facts as well as feelings about the facts which may result in a bias in how information is presented. The bias of the teacher may very well skew the content. The larger number of teachers available to communicate the core content affects the percent actually conveyed. Thus, at the present time, the technique of teaching chemotherapy employed

at the target institution may not be adequate to guarantee sufficient education of the patient prior to giving informed consent. The teaching program must be addressed, evaluated and changed to meet the increased volume of information to be taught as well as the increased number of nurses responsible for conveying the information.

The use of a printed tool or checksheet as a guide for chemotherapy teaching has been employed by institutions. Such tools stress the content to be covered but do not address the ability of the nurse to convey the information in a manner that is understood by the patient (Garrison, et al, 1983). A printed tool may very well act as an adjunct for facilitating teaching, but it will not fulfill the art of listening. The ability to learn is directly related to the ability to listen.

Listening is integral to communication (Willen, 1986). It is an active experience involving concentration and effort. The patient has to overtly decide to participate in the communication. The ability to do so may very well be skewed by the perceived scope of catastrophic illness being addressed. The cancer patient actively experiences

the process of grieving when first diagnosed. The grieving process as researched by Kubler-Ross (1969) was initially thought to pertain to patients being informed of a terminal illness. However, the process and the stages of denial, anger, bargaining, depression and acceptance are now thought to be applicable to individuals adapting to living with diagnoses of chronic illnesses such as cancer. The ability to absorb information can only be done when one's adaptive process allows. Thus, learning takes place when an individual overtly agrees to listen to information being presented.

Therapeutic communication, according to Cerino (1984), is an interaction that is purposeful and focused solely on the patient. Active listening involves more than just hearing what is being said. Meyers and Meyers (1980) believed listening implies "understanding the feeling context in which the communication is taking place". Active listening is a learned skill, an overtly purposeful act of the one wishing to incorporate the information presented into the individual's being. The individual must want to listen, a quality that is frequently tantamount to impossible when actively grieving over a diagnosis

of cancer. Once understanding of the scope of illness begins, the patient most often begins reflecting on life and that desired quality for self. At the time of such initial introspection and reflection, true communication between nurse and patient can begin; thus, learning begins. Imel (1988) corroborated the necessity of establishing a positive environment for adult learning to begin, using such strategies as adult-to-adult rapport, creation of a participatory environment and facilitating adult independence.

Learning can take place only when the one receiving the information understands the content as presented. The individual's background and level of comprehension must be considered when contemplating communication for the purpose of sharing information. The professional nurse's role in assessment of the criteria is all important. The nurse begins establishing rapport with the patient from the initial interaction and continues to develop the rapport with each meeting. The relationship grows in many respects and becomes the basis of assessing the right environment for learning to take place. Wickett (1986) compares five models of independent learning deemed suitable for adult education programs. One common

denominator for the five is the presence of a facilitator who works in some way with the student in the learning process. The nurse is the facilitator when the learning is being done in the context of chemotherapy teaching.

The nurse-patient relationship, ongoing and confidential, provides support and nourishment in times of stress. Stress is ever present and vital to life. The distress that so often appears when a person is diagnosed as having cancer, and having to receive chemotherapy, can be a hindrance to the learning process. The nurse-patient relationship helps in breaking down the distress in order for active listening to occur on a level of understanding pertinent to the patient's environment. Thus, the inherent importance of the 1:1 nurse-patient or teacher-pupil relationship cannot be overlooked.

The advantages of the 1:1 teaching situation are overwhelmingly crucial to effective learning at the target institution. Collins and Walker (1990), both cancer patients, and presently active as volunteers in the cancer program at the target institution, agreed the trust established between patient and nurse was a prime positive connection

during the treatment phase of the specific disease process. Thus, the author believes that any strategy change for teaching must consider the nurse-patient relationship.

In the past, the 1:1 personal approach to chemotherapy teaching was adequate. Now, however, the increased total number of professional nurses as well as the increased scope of information needed to be exchanged and the increased numbers of patients to receive the information at the target institution require changes in procedure. The incorporation of a checklist as a tool for the nurse would in fact give a guide to content needed to be conveyed but, as previously discussed, would not guarantee the information given would be done in an objective manner. The strategy chosen to consider was one combining the 1:1 teaching experience combined with core information provided on audio visual tapes. The use of audio visual tapes have been often employed effectively as an adjunct to personalized teaching (Rosen, 1970). However, the use of tapes solely has not proven to be effective means of learning. A possible reason is the lack of active communication that is present when one learns from a tape versus

a human being. The "give and take" of interpersonal communication is missing. Active listening may be present to a certain extent but not entirely as the teacher is not able to perceive how the learner is accepting the information as presented. Allen (1972), in assessing the effectiveness of video tapes in the teaching of nursing, found that the actual effectiveness was limited by the uncontrolled variable of individual needs. The needs may include the basic level of comprehension, the stress level of the learner, and the actual language employed for understanding.

A literature review of articles written in the past 15 years gave a definite trend that supported the relationship of patient education to the actual health status of the cancer patient. Dodd's research (1981, 1982a, 1982b, 1983) provided evidence that the patient's ability for self help is enriched by the quality of education received concerning the illness and treatment prescribed for dealing with the illness. Patient education must be consistent in the information provided as well as establishing an atmosphere in which the patient can perceive gaining control over life. The diagnosis of cancer most often

results in an inner feeling of losing control over one's own destiny. The pertinence of education reveals active involvement in decision making in the treatment process in toto. Groenwald, et al, (1990), noted that active involvement by the patient in the education process promotes a proactive status. Active involvement is essential for the patient in order to engage in a self-determined quality of life. Patient education becomes the facilitator for adaptation during various phases of the cancer experience, i.e., living with cancer. The concentration of education required at time of diagnosis, according to Mullan (1985), should focus on the medical and psychosocial needs for information and self help. In addition, two further stages of the cancer experience exist with need for continuing education on a less formal basis. The stage of "watchful waiting" commences when active treatment is completed and the patient is beginning to reintegrate into the community. Emphasis is on wellness. The education during the "watchful waiting" time of the cancer patient's life is very often effectively obtained via a group approach. Such a vehicle is corroborated in the target community by

Collins (1990) who, with the author, facilitated a support group begun in 1982 on a monthly basis and expanded to bi-weekly two years ago. The "final season" of survival is described by Mullan as permanent survivorship and the focus of education is the empowerment to stand up for one's own rights. The target institution's patient education program focuses on the initial stage of survivorship: the acute wherein medical and psychosocial needs are actively addressed in hopes of containing the illness.

The growth of the cancer program at the target institution demands the growth of the teaching component of the same program. Thus, the challenge existed to adopt a curriculum to benefit the patient while maintaining the standard requirements of the information needing to be communicated. To enhance the listening, and ultimately the learning, the information must have the capability to be understood. The curriculum developed will incorporate the premise of a person's listening ability and the relationship to understanding and learning. If patient education is to be valued as an integral part of the cancer experience, then the time and atmosphere for making the experience a positive one must be assured. The

optimal environment for learning must be established. The privacy of the learner must be considered and the consistency of material presented must be assured.

The author proposed the combination of audio visual tape and 1:1 teaching as the optimal means for achieving the task at hand: chemotherapy teaching. The value of a 1:1 nurse patient interaction has already been established. The time spent in the particular aspect of the learning process will be item specific to an individually ordered menu of drugs. The core information will be communicated by audio visual means.

The incorporation of the audio visual learning module was justified as an adjunct to the total teaching plan. Studies corroborate such learning may be advantageous. Monaco (1972) noted that audiovisuals are tools of patient education but are not considered adequate for providing the total educational experience. The main variables to significant learning from tapes are inherent to one's ability to understand what is being said. The author believed such tapes must be developed in accordance with the above variable; thus, the generic information will be communicated on three different levels. One

tape will aim at those individuals having completed the equivalent of an eighth grade education. The second, will be geared to the high school graduate and the last, post twelfth grade formal education. Although the content will encompass that common to chemotherapy in general, the semantics will differ. The goal of developing three distinct tapes was optimal understanding and listening which hopefully will result in optimal learning. The tapes will be made by the author, as the author is a known healthcare worker to the cancer patient, as well as an Oncology Certified Nurse. Stanford (1974) suggested learning is enhanced by familiarity with the teacher as well as the knowledge base of the communicator.

According to Tough (1981) "core" material can be successfully introduced to the student via the utilization of a good adult education technique, plus the initiation and stimulation of independent learning activities. At the target institution of the practicum the "good adult education technique" is the videotape and the "independent learning activities" are the use of the NCI booklets and the 1:1 nurse patient interactions. The curriculum development incorporating the audio visual with the 1:1 teaching will hopefully

result in a product that is understood by the patient and received on a level of guaranteed reliability. The curriculum will be standardized without sacrificing the personal touch. The use of tapes should ultimately save time for the professional who has such expanded demands while assuring the nurse adequate teaching occurred.

Chapter III

Method

The implementation of the Vernot Teaching Tapes (VTT) was done on the cancer unit of the target institution referred to in the former chapters of the practicum. Prior to actual project start-up, a brief questionnaire was given to the professional nurses on the cancer unit to ascertain current perceptions of methodology used to inform patients of the chemotherapy treatment (Appendix E:76, questions one through four). A total of nine professional nurses completed the questionnaire which represents 75 percent of the total RN population of the cancer unit at the target institution. A brief explanation of the project was given each patient prior to requesting permission from the specific patients (Appendix G:81). The criteria for becoming a participant was solely that of employing individuals who to receive the initial chemotherapy regimen as treatment for the disease process dubbed cancer. The presumption was made that such individuals did not have a significant knowledge base of the subject matter. After obtaining consent from participants, the tape was shown to each patient.

A brief questionnaire was completed after viewing the tape which established a level of understanding of the information presented via the teaching tool (Appendix D:72).

The registered nurse designated to administer the chemotherapy is also responsible for the teaching component of the protocol as well as imparting generic information about chemotherapy. The designated RN assumed the responsibility of assessing the appropriate level of tape to be viewed by the patient. Interestingly enough, the tape most often chosen for patient viewing was the second one. The subjective assessment was complemented by a brief interview conducted by the nurse with the patient (Appendix H:83). The professional nurse had each participant in the study complete a brief questionnaire after the chemotherapy teaching was completed (Appendix D:72). The goal was that the patients would score at least 70 percent on the initial questionnaire. The questions were again be asked prior to initiating the second course of chemotherapy in hope of measuring retention of information over a period of time. The normal interval between courses of treatment with chemotherapy is three or four weeks. A satisfactory

score of 70 percent was considered acceptable and perceived that such a score would acknowledge a general information base of chemotherapy. In actuality, the process of sharing the information was one of satisfaction for the patient and the nurse as well.

As previously mentioned, the actual time frame for implementation was directly proportional to the number of eligible subjects. The newly diagnosed cancer patient requiring chemotherapy as the treatment of choice varies greatly from month to month. The author's goal was to have a minimum of 12 clients as the data base, in a time frame of 60 days. The author's plan was to have the subjects enrolled in the study by day 30 and to complete the study by day 60. The plan necessitated adjustment for just two clients were enrolled by day 29 and by day 45 an enrollment of eight was achieved. The final "n" was eight, which is 66 percent of the original target number. Not all cancer patients requiring chemotherapy receive the treatment in the acute care setting, such as the target institution. Many regimens can be successfully administered in the physicians' office or the outpatient area of the target cancer unit. Thus, the available population is once again limited

to individuals whose regimen necessitates hospitalization or individuals who receive the treatment in the outpatient area of the cancer unit.

The actual plan for implementation was explained in two definitive aspects. An outline of the entire plan is found in Appendix I:85. The first was dubbed the pre-implementation portion, during which time, the professional nurses on the cancer unit of the target cancer center completed questions one through four of the Professional Task Survey (Appendix E:76). The information gained from the survey established current perceptions shared by the RNs of the present methodology employed to inform patients of the chemotherapy ordered as primary treatment. Also, during the pre-implementation phase of the practicum, the actual tapes were made. The target institution has a communication center which is available for such development. The VTT were three in number, all lasting approximately 15 minutes in length. The tapes were developed as described previously, with hopes that the level of patient understanding was met. The second portion was the actual implementation of the Vernot Teaching Tapes. On the day of initial chemotherapy treatment, often called cycle one, the

called cycle one, the RN performed a general patient assessment and completed the RN/Patient Interview Synopsis (Appendix H:83). The professional nurse subsequently informed the patient of the practicum study, requested patient participation and requested patient read the Explanation of the Study and Patient Form and sign the consent form found therein (Appendix G:81). If the patient was unable to read the above mentioned information, the RN was instructed to read the form to the patient. No individual approached concerning the practicum was unable to read. If a signature was not possible due to inability to write, then the patient mark was to be considered acceptable. If such was not possible, verbal permission was considered acceptable in presence of two witnesses. All clients were able to sign the consent form.

The appropriate VTT was chosen by the RN and the patient viewed the tape. Following the tape viewing, the professional nurse then had the patient complete the brief Patient Questionnaire (Appendix D:72). The 1:1 nurse/patient interaction continued with the goal of same being the sharing of information specific to the drugs prescribed for the individual patient. As stated earlier, there are drug specific

side effects and actions that must be shared with the patient prior to administration of the initial chemotherapy. The nurses' comments halfway through the study specifically recognized how much more relaxing the 1:1 teaching interlude seemed having the patient view the tape prior to the personal meeting. After the completion of all the above, the RN then administered the chemotherapy regimen. The format was repeated with each participant in the study.

The follow-up was conducted at the time of the second chemotherapy treatment. The typical schedule is set up for cycles of 21 or 28 days. Upon admission, the RN once again performed a general assessment of the patient, followed by the administration of the Patient Questionnaire (Appendix D:72). Thus, retention of information disseminated at time of cycle one was determined. The patient's knowledge base was then supplemented as needed to give patient adequate feeling of information gained. The nurses acknowledged that the information retained was significant and perceived to be more than was remembered by clients who did not have the VTT as part of the official preparation for informed consent for administration of

chemotherapy. The second cycle of chemotherapy was then administered by the RN. The above steps were completed as presented with each practicum participant.

A mid-study assessment was done at 30 days after implementation begun. The number of patients enrolled in the study was tabulated, and as stated above the time was extended due to the low number of participants. The results of the patient questionnaire was coded. An assessment was done of the practicum schedule for completion within the two month time frame and the time adjustment was made to extend by 14 days. The professional nurses involved in the study concurred that the time frame adjustment was critical. Concensus was that the time of year had a negative influence on the number of participants. Retrospective examination of newly diagnosed patients during the first two months of the year corroborated the premise that the timing of implementation did not necessary reflect normal activity on the target unit. Project completion was predetermined as day 60 and was at day 30 changed to day 75. All project information was gathered and coded. The RN post Professional Nurse Task Survey was completed and results tabulated (Appendix E:76, questions one to

ten). An evaluation of the practicum was done. The plan of the author is to incorporate the VTT in the core plan of care for all cancer patients receiving chemotherapy at the target institution based on the evaluation of the practicum. Informally and prior to evaluation, the professionals on the target unit decided to incorporate the VTT as standard of care for all patients receiving chemotherapy. In fact, the tapes have been viewed by a number of individuals, including a few asking to view even though the treatment of chemotherapy was one already known to the viewer.

Chapter IV

Results

The plan for evaluating the objectives of the practicum is presented herein. The tools utilized are found in Appendices D:72, E:76 and H:83. The result of the practicum will be a core educational product that will assure the cancer patient receiving chemotherapy a basic knowledge of the treatment process. The individuality of the participants must be carefully considered; thus, the concept of three separate teaching tapes.

The first objective of the practicum was to have at least 75 percent of the participants demonstrate understanding of chemotherapy as a treatment regimen. In order to possibly attain the objective as presented, the subject must understand the information contained in the teaching module. The concept of individual understanding and ability to learn has been discussed in Chapter II of the practicum and will not be reiterated. Suffice the conclusion that learning can take place only when there is understanding of the material presented. To assist in ascertaining

the level of understanding, the professional nurse performed an objective assessment of the patient (Appendix H:83).

The method of assessment was a personal interview of the subject and family member whenever possible. The information obtained gave a basis for assessment that can be turned into a profile for presenting the appropriate VTT from the three. Of the eight clients enrolled in the study, five had family members present at the time of initial treatment. The professional nurses based the assessment specifically to the patient but concluded the family member to be of comparable level of understanding. The tool (Appendix H:83) as developed did not overtly allow for pertinent assessment of the added individual, although the unit of care at the target institution for cancer patients is the patient and family. The specific questions of Appendix H:84 were answered by the nurse prior to choosing the appropriate tape. The questions are specific to the individual as presented at the time of treatment. Question one gives an objective analysis of the level of formal education completed. Note that the educational process must not presume to end with the termination of the formal educational process,

thus, the assessment must be inclusive of other possible avenues of learning. An example might be attainment of a General Equivalency Diploma (GED) by one who has completed just a formal educational level much below that considered acceptable for graduation from high school. Of the eight enrollees ("n"), one (client A) stated having completed eight years of formal education. The patient was eager to learn about the treatment prescribed. The nurse chose to have the person view VTT I. The second paticipant (client B) stated finishing 2.5 years of college. At the time of initial interaction, the paient was alone, elderly and by self admittance, not very perceptive. Based on the assessment, VTT II was chosen for viewing. Client C presented as astute and anxious to gain all information for decision making prior to undergoing extensive chemotherapy. The level of formal education was stated as 13 years. The diagnosis of cancer was not a new one but the mode of treatment was. The nurse chose VTT III for the client. The next participant (client D) was a high school graduate, a widow whose support system was comprised of a daughter who was a professional with state government. The patient was assessed as

being anxious and VTT II was chosen for viewing. At another time the daughter reviewed VTT III just for personal comparison. Client E, a high school graduate was accompanied by a parent who had completed just nine years of formal education and was not, by own admission, at all knowledgeable of cancer or the treatments involved. The professsional nurse chose to have the patient and parent view VTT I & II. The reasoning shared with the author was sound. Reinforcement of information would not be controversial for the patient as personal anxiety was present. A level of understanding would have a better chance of being achieved for the parent if VTT I was seen. The patient expressed desire to hear repetitive information, as historically personal learning was best achieved by going over material more than one time. The next participant preferred not to share the amount of formal education accomplished. The individual presented as able to understand on a level comparable with the norm of total "n". VTT II was shown to the patient. No family or significant other was present. Enrollee seven (client G) was also a high school graduate who viewed VTT II after the nurse assessment. The last participant, client H, completed

12 years of formal education and was recently retired from family owned retail business. The patient's sister, also the business associate, came at the time of initial treatment. Both appeared to understand the spoken word, although natives of a foreign country, and VTT II was shown to both. The information obtained from Question two is rather succinct. If one is visually impaired to the extent of not being able to see the viewing screen, an alternative method may be indicated, for example, listening, as the focus of information presentation. The same process might be appropriate for the hearing impaired who may be able to comprehend via viewing and absorbing the information by lip reading, thus, the inclusion of Questions four, five and six in Appendix H:83. General information gathered from the RN/Patient Interview Synopsis (Appendix H:83) as utilized in the practicum gave an overall picture of the clientele that included the following facts: the average patient had completed high school or the equivalent, was accompanied by a family member about 50 percent of the time and was open to learning about the treatment being prescribed although anxious about the unknown.

Once the criterions were established that the

subject had the ability to absorb information as presented in the VTT, the professional nurse chose the one to be viewed, as stated above. The patient and family member, if available, then viewed the tape. At the conclusion of the video session, a 10 item questionnaire was completed by the patient (Appendix D:72). The questions as presented are thought to be those that provide a core of information necessary prior to receiving any type of chemotherapy. As discussed in an earlier chapter of the practicum, the teaching tape was supplemented by the 1:1 nurse:patient teaching of drug specific information. The interaction hereto referred took place after completion of the patient questionnaire. The hope was that a score of 70 percent with correct answers would be obtained. The questions as presented yielded an average score of 80 percent by the eight participants (Appendix J:89). Question six of the Patient Questionnaire was interpreted as unclear. The VTT included all of the listed side effects. However, the tape does not stress dehydration as one of the most common. Rather the tape instructs the necessity for proper hydration and thus, the need for intravenous fluids. One half of the patients

marked question six excluding item "c", which is dehydration. In retrospect, the question could have been clearer. Dehydration is surely a concern when chemotherapy is administered, but not generally considered one of the "most common" side effects of the treatment. If credit is given for question six including item "c" or not including the item, then the average percent achieved by the group becomes 85. Either way, the percent of correct items exceeded the hoped goal of 70 percent by 100 percent of the patients enrolled in the study. No other trends were noted in the information not properly marked on the questionnaire. The information not learned, as evidenced by incorrect responses, was reviewed during the supplemental teaching session between nurse and patient. In addition, at the time of the second chemotherapy treatment, some 21 to 28 days later, the same 10 questions were again presented to the subjects. The intent of the activity was to ascertain the level of information retention over a period of time. The information obtained gave the nurse an objective measure of the patient's present state of being and where further teaching was needed. The scores achieved an average of 82 or 94 percent

according to how item six was scored. Note that "n" for the second questionnaire was five. Due to deterioration of performance status, three candidates were unable to comply with the treatment protocol. Information gained from the second questionnaire affirms the premise that learned information can be retained, especially when such information is of high importance to the learner. The treatment for a potentially devastating disease is presumed, for the purpose of the practicum, to be of such importance to the patient. At the time of the second chemotherapy treatment, two individuals attained a score of just 60 percent if allowance for question six is not made. Both of the patients exhibited more that usual distress at the alteration in looks resulting from alopechia and the anxiety may have had influence on ability to answer correctly. In addition, the professional nurses involved in the actual teaching reached concensus that from now on, at the target center, each patient receiving chemotherapy will have the opportunity to share information and concerns with the nurse prior to receiving the medicine. The time frame will vary from instance to instance, but the patient and nurse will set aside time for review

and banter following the nurse assessment on admission.

The second objective as stated in Chapter I of the practicum concerned the professional nurses' time involved in the instructional portion of chemotherapy administration. As discussed in earlier portions of the practicum, the responsibility for patient instruction belongs to the nurse. The increasing scope of practice, combined with the increase in patient population and the lack of sufficient numbers of professional nurses choosing oncology as a career, make the use of time a most important entity. The author developed a tool that gave an objective analysis of time spent teaching as well as time saved in the activity employing the VTT. The tool is presented in Appendix E:76 and is dubbed the Professional Nurse Task Survey. The survey is divided into two separate parts.

Prior to implementation of the practicum, the professional nurses who administer chemotherapy at the target institution completed a four item questionnaire. Nine individuals assigned to the cancer unit completed the initial survey. The items address the interaction of nurse and patient for the purpose of chemotherapy teaching. The questions are rather

self explanatory. The first addresses the actual time perceived by the nurse as that spent in actual teaching. Earlier discussion in the practicum notes the time needed for teaching is not always the same as the actual interlude spent in the activity. The difference may be a twofold occurrence, more material needed to be presented and less time in which to accomplish the teaching. The nurses average length of time engaged in chemotherapy teaching as reported in the first questionnaire was 18.8 minutes. Not one of the nine reported that the time was perceived as adequate. The five nurses involved in the use of VTT expressed satisfaction with the amount of time spent teaching. The actual time spent by the individuals was 20 minutes, just 1.2 minutes more than the average so spent without use of the tape as a tool. Analysis of the figures reported (Appendix K:91) by the five nurses involved in the study substantiate the premise of time saving. Sixty percent of the nurses saved time or spent no more time when using the tape. The two nurses comprising the other 40 percent reported spending more time. The survey was not specific as to whether the time spent teaching when using the VTT included the actual patient viewing

of the tape. Thus, the data may possibly not be telling the complete story. Question two was to give a measure of perceived adequacy of the teaching time frame employed by the nurse. Seven of the nine nurses recorded a feeling of inadequacy in regard to the time spent teaching chemotherapy. Of the five enrolled in the study, two had perceived the time spent as adequate prior to using the tape and four of the five so reported after employing the tape. Interestingly, the nurse reporting not enough time spent in the second questionnaire actually stated spending 2.5 times as much when utilizing the VTT. Two nurses stated time saved as five and ten minutes when utilizing the tape. The second objective of the practicum referring to time saved by the nurse is considered met by the information reported.

The third and fourth questions were aimed at obtaining the nurses' perceptions of the patients' actual understanding as demonstrated. As has been discussed, learning takes place only when there is understanding. At the target institution there is no consistent evaluation tool to measure the learning of information concerning chemotherapy as a treatment protocol. Rather, the situation is an individual

nurse analysis that adequate patient understanding of the protocol exists prior to administration of the drugs. The responses to questions three and four may give a basis for determining the nurse's perceptions of information shared in the manner utilized at the present time at the target institution. Concensus was that the information shared during chemotherapy teaching was understood by the patient at least to a certain degree (Appendix K:91). The five nurses answering the questionnaire after utilizing the VTT affirmed the information was able to be shared in a more complete manner (Appendix K:91) as extrapolated from the Professional Nurse Task Survey (Appendix E:76).

The professional nurses viewed the VTT prior to participating in the study to provide a knowledge base of level of content contained in each. The nurses were then asked to utilize the appropriate teaching tape with each new patient prior to administrating the initial chemotherapy treatment. The nurses followed the teaching plan (Appendix I:85), thus, consistency was assured in the procedure process. After 30 days, halfway through practicum implementation, as well as at the completion of

practicum implementation, the nurses were required to complete items one through ten of the Professional Nurse Task Survey (Appendix E:76). Questions one through four are the same as those presented prior to implementation. The remaining six questions refer to the instructional package including the VTT. The responses to questions five through nine gave a compilation of nurses' perceptions of teaching protocol and amount of information shared utilizing the generic tapes as a preview to the 1:1 nurse:patient interaction. Halfway through the practicum implementation, day 45, the total number of nurses involved numbered two and the answers to the 10 questions were no different than at completion of the study.

Question five is self explanatory and will hopefully result in affirmation of the VTT as an educational tool. One hundred percent of the nurses answered affirmatively to the question. Question six is an objective attempt to obtain the individual nurse's perceptions of the teaching process combining the VTT and the 1:1 interaction with specific information. Four of the five nurses stated the tape afforded the opportunity to share more material within

the same time frame. The fifth nurse reported ability to enhance the information within the same time frame. Interestingly, the fifth nurse was the one who reported saving 10 minutes or more utilizing the VTT. Question seven is aimed at obtaining the nurse's response confirming the actuality of time saved. As has already been discussed, the time saved was by concensus appreciable. All five nurses report time saved in answer to question seven. A possible conclusion, for at least some of the five, is the actual time reported spent teaching with the VTT as a tool included the time viewed as time teaching, versus just the time spent in a 1:1 activity. The next question hoped to validate the VTT as an adjunct to teaching prior to informed consent. All five nurses answered the question afirmatively. Question nine reaffirms patient demonstration of knowledge learned combining the teaching tape with the 1:1 nurse:patient process. One hundred percent answered the question in the affirmative.

The goal of the practicum yielded a demonstrated level of understanding of the treatment called chemotherapy by the patients enrolled in the study. Such knowledge was considered achieved by successful

completion of the 10 question survey with a minimum score of 70 percent by at least 75 percent of the patients receiving the instruction (Appendix D:72). In actuality, 100 percent of the patients achieved a score of 70 percent or better on the initial patient questionnaire and if allowance for question six is made, then 100 percent of the participants achieved the goal of 70 percent correct answers given on the repeated survey at the time of second chemotherapy. Without such an allowance, just 60 percent of the five participants remaining in the study at time of completion achieved the expected outcome.

A second goal was to be considered achieved if 100 percent of the professional nurses involved in the practicum implementation acknowledge time saved in using the VTT. Question seven addresses the time involved and all five nurses responded "yes". Thus, the goal was considered achieved.

The last question of the Professional Nurse Task Survey (Appendix E:76) addressed the third objective of the practicum. The author's final objective was aimed at a change in nurse's self perception of a job well done. Prior discussion established the fact that the job required is often overwhelming to the

individuals available for job performance. The implementation of the VTT resulted in a positive attitudinal change in the professional nurses who are employed on the cancer unit of the target institution. Although attitudinal changes are more difficult to objectively measure, for purposes of the practicum, a positive correlation of satisfactory job performance was accepted with the nurses' affirmative response to question 10 at least 75 percent of the time. As the nurse manager of the cancer unit, such a change will serve to enhance the overall ambience of the unit. The degree of satisfaction obtained in job performance will hopefully result in a nurse who is content, competent and involved in the cancer program as such exists in the target center. The population served will then be benefited as well as the community at large. The question was unanimously answered in the affirmative. Thus, the goal was considered achieved.

Chapter V

Recommendations

Based on the positive results of the practicum project as presented in the preceding chapters, the practicum will become a useful tool for oncology nurses. As such, the quality of generic information presented to patients prior to initial reception of chemotherapy will be consistent. The tapes will be updated and edited as the information needed to be shared is changed. The 1:1 nurse:patient interaction can focus on the specific drug information pertinent to an individual's actual treatment. The resulting product will be a total picture of the treatment process for the patient to consider prior to giving informed consent.

At the completion of the project with the positive evaluations performed, the author desires the tool be made available for any healthcare worker who might find the VTT of benefit. Additional copies of the tool will be made available through the foundation of the target institution. Such availability will be made known to healthcare workers via the promotional material of the foundation which is proud to have

as a component a specific cancer program for patient education as well as staff development and patient services.

References

Allen, Moyra, The Development of Clinical Nursing Situations on Videotape for Use via Closed-Circuit Television in the Teaching of Nursing. Final report. McGill University, Montreal (Quebec). School of Nursing. Department of National Health and Welfare, Ottawa (Ontario). 1972.

Bruijn, Julie. Telephone interview. December 10, 1990.

Bush, David F., "Do Gender and Type of Health Professional Influence Effectiveness?" Preliminary Draft. Paper presented at the Annual Meeting of the Eastern Communication Association (Ocean City, Md.), April, 1983.

Cerrino, Noreen Dunn, "Therapeutic Communication Necessity in Hospice Care," The American Journal of Hospice Care, Spring, 1984.

"Chemotherapy and You." National Cancer Institute, 1988.

Collins, Sissy. Personal interview. November 10, 1990.

County Planning Department, Statistical Digest, 1989, pp. 8, 18, 21.

Dodd, M., and Mood, C., "Chemotherapy: Helping Patients to Know the Drugs They are Receiving and Their Possible Side Effects." Cancer Nursing, 4:311-318, 1981.

Dodd, M., "Assessing Patient Self-care for Side Effects of Cancer Chemotherapy." Part I. Cancer Nursing, 5:263-268, 1982.

Dodd, M., "Cancer Patients' Knowledge of Chemotherapy: Assessment and Informational Interventions," Oncology Nursing Forum, 9:3944, 1982.

Dodd, M., "Self-care for Side Effects in Cancer Chemotherapy: An Assessment of Nursing Interventions. Part II." Cancer Nursing, 6:63-67, 1983.

Fiebelkorn, Judith. Personal interview. October 5, 1990.

Florida Board of Nursing. 1989.

Garrison, Juanita, et al. "Accessibility and Utilization of Educational Materials for Cancer Patients." Oncology Nursing Forum. Spring, 1983, pp. 60-62.

Gorman, Alfred H. Teachers and Learning. 2nd ed. Boston: Allyn and Bacon, Inc., 1974.

Groenwald, Susan L., et al, ed. Cancer Nursing Principles and Practice, 2nd ed. Boston: Jones and Bartlett, 1990.

Health and Human Services, Commission on Nursing, 1988.

Imel, Susan. "Guidelines for Working with Adult Learners." Eric Digest No. 77. 1988. ERIC ED 299 456.

Kubler-Ross, E. On Death and Dying. New York: Macmillan, 1969.

Lentz, Libby. Telephone interview. December 8, 1990.

MacDonald, Jack, M.D. Personal interview. December 15, 1990.

Meyers, G.E., M.T. Meyers. The Dynamics of Human Communication. 3rd ed. New York: McGraw-Hill, 1980.

Monaco, R.M., L. Salfen, J. Spratt. "The Patient as an Education Participant in Health Care." Journal of Missouri Medical Association. 69(12): 932-937, 1972.

Mullan, F., "Seasons of Survival: Reflections of a Physician with Cancer." New England Journal of Medicine. 313, 1985, pp. 270-273.

Oncology Nursing Society: Outcome Standards for Cancer Patient Education. Pittsburgh, Oncology Nursing Society, 1982.

Oncology Nursing Society: Guidelinge for Chemotherapy Administration. Pittsburgh, Oncology Nursing Society, 1988.

Pendleton, D.A.: Memory for Medical Information. Paper Presented at the Colloquium on the Consultation, Ciba Foundation, London, U.K. March, 1982.

Rosen, Marvin J.: "An Evaluative Study Comparing the Cognitive and Attitudinal effects of Two Versions of an Educational Program About Mind-Affecting Drugs." Final report. Evaluation and Research Associates, los Angeles, Calif. July, 1970.

Stanford, Gene & Roark, Albert E. Human Interaction In Education. Boston: Allyn and Bacon, 1974.

Swain, Elaine. Personal interview. November 29, 1990.

Tough, A. Learning Without a Teacher: A Study of Tasks and Assistance During Adult Self-teaching Projects. Toronto: The Ontario Institute for Studies in Education, 1981.

Walker, Maye. Personal interview. December 17, 1990.

Wickett, R. E. Y. "Independent Learning Modules: A Comparison." Paper presented at the Adult Education Conference, Hollywood Fl., 1986. ERIC ED 276 845.

Willen, Jeri. "The Skills of Listening." The American Journal of Hospice Care. July/Aug., 1986, pp. 39-41.

Appendices

Appendix A

Hospital Growth as Represented by Bed Capacity

Appendix A

Hospital Growth as Represented by Bed Capacity

Year	Number of Beds
1949	75
1951	119
1954	150
1956	258
1960	300
1969	448
1972	511
1977	661
1988	771

Appendix B

Average Annual Census and Acuity

Appendix B

Average Annual Census and Acuity

Fiscal Year	Average Census	Average Acuity
1986-87	26.00	1.55
1987-88	28.00	1.60
1988-89	28.40	1.70
1989-90	32.05	1.88

Appendix C

Recommended Versus Actual Staffing

Recommended Versus Actual Staffing

Fiscal Year	Recommended Staffing	Actual Staffing
1987-88	24	20
1988-89	25	22
1989-90	29	24
1990-91	30	25

Appendix D

Patient Questionnaire

Appendix D

Patient Questionnaire

1. What is chemotherapy?
   a. treatment utilizing chemicals
   b. treatment utilizing radiation
   c. combination of a and b
   d. treatment utilizing surgery
2. Chemotherapy is given by:
   a. mouth
   b. IV (Intravenous)
   c. SQ (Subcutaneous) injections
   d. any single or combination of a, b, c
3. Chemotherapy is a systemic treatment. This means that
   a. the drugs will travel throughout the bloodstream
   b. will attack just the cancer cells
   c. will attack cancer cells as well as some cells that are not cancerous
   d. 1. a and c
      2. a and b
      3. a, b and c
      4. b and c

4. All types of cancer can be treated with chemotherapy.

    a. True

    b. False

5. Proper nutrition is important to proper cell reproduction.

    a. True

    b. False

6. There are side effects a patient may experience after receiving chemotherapy. The most common of these include:

    a. nausea

    b. vomitting

    c. dehydration

    d. alopechia (loss of hair)

    e. all of the above

7. Some of the drugs included in treatments may be vesicants.

    a. True

    b. False

8. A vesicant if it infiltrates out of the vein may cause:

    a. pain

    b. sluffing of skin

    c. nausea

    d. b and c

    e. a and b

9. Some drugs given for cancer treatment may cause a change in one's desire for food.

    a. True

    b. False

10. Some drugs given for cancer treatment affect the bone marrow production.

    a. True

    b. False

Appendix E

Professional Nurse Task Survey

Appendix E

Professional Nurse Task Survey

1. How much time do you spend teaching prior to administering the initial chemotherapy?

   a. 10 minutes
   b. 15 minutes
   c. 20 minutes
   d. 25 minutes
   e. greater than 25 minutes
   f. less that 10 minutes

2. Do you feel this time is adequate?

   a. Yes
   b. No

3. Does the patient demonstrate understanding of the treatment protocol?

   a. Yes
   b. No

4. How is this understanding demonstrated?

   a. by answering questions
   b. by demonstrating ability to discuss protocol
   c. by asking questions
   d. other (please explain)

   _____
   _____
   _____

5. Does the use of the generic tape aid your teaching?

   a. Yes
   b. No

6. Does the tape afford you time to enhance teaching and become specific?

   a. Yes. It can enhance information provided in time frame available.
   b. No. The tape does not afford knowledge sharing.
   c. Yes. The tape makes it possible to cover more material in the time frame available.

7. Is the use of the tape a time saver?

   a. Yes.
   b. No.

8. Does the use of the tape give you a basis from which you can develop a teaching plan that provides information to the degree that the patient can give informed consent?

   a. Yes.
   b. No.

9. Does the patient demonstrate knowledge of the chemotherapy process?

   a. Yes.
   b. No.

10. Do you feel your job of teaching is enhanced by employing the tape to use as beginning point of the process?

    a. Yes.
    b. No.

Appendix F

Annual Number of Chemotherapy Drugs Administered

Appendix F

Annual Number of Chemotherapy
Drugs Administered

Fiscal Year	No. of Chemotherapy Drugs Administered
1987-88	1660
1988-89	1735
1989-90	1800
1990-91	1889

Appendix G

Explanation of Study and Patient Form

Appendix G

Explanation of Study and Patient Form

The study is an attempt to provide the cancer patient receiving chemotherapy a core course of information regarding the treatment in general. It involves viewing a tape and answering a brief questionnaire.

I, _____, consent to participate in the practicum study of Ms. Vernot. I understand that the information shared in the study will hopefully be of benefit to myself and others in the future.

Appendix H

RN/Patient Interview Synopsis

Appendix H

RN/Patient Interview Synopsis

1. How many years of formal education does patient state he/she has completed? _____
2. Does patient have a physical handicap that would preclude ability to view and listen to the chemotherapy teaching tape?_____
3. If answer to #2 is YES, please state specific handicap.

   _____

   _____
4. If patient is unable to view tape but can hear, is it appropriate to employ the teaching tool?

   _____
5. If patient is unable to listen to tape but can efficiently read lips, is it appropriate to employ the teaching tool?

   _____
6. If answer to #4 or #5 is YES, please elaborate to give basis for use of tape with a visually or hearing deficited patient.

   _____

   _____

   _____

   _____

Appendix I

Teaching Plan

Appendix I

Teaching Plan

The actual plan for implementation can be explained in the following manner:

I. Pre-implementation- the RN will complete questions one through four of Professional Nurse Task survey (Appendix E:63) to establish current perceptions of methodology used to inform patients of the treatment dubbed "chemotherapy". The Vernot tapes will be made.

II. Implementation of study

A. Day of initial chemotherapy treatment (Day 1)

1. RN performs general assessment of patient and completes RN/Patient Interview Synopsis (Appendix H:67)

2. RN will inform patient of practicum study.

a. patient will read Explanation of Study and Patient Form (Appendix G:66)

b. patient will sign consent (Appendix G:66)

3. RN will choose tape deemed appropriate for the patient's level of understanding
4. RN will have patient view the tape
5. Patient will complete the brief Patient Questionnaire (Appendix D:60)
6. RN will complete teaching concentrating on specific drugs to be given the patient
7. Chemotherapy will be administered
8. The above seven steps will be repeated with each participant

B. Day of second chemotherapy (Day 21 or 28)

1. RN will perform general assessment of patient
2. RN will administer Patient Questionnaire (Appendix D:60) to assess information retention
3. RN will supplement informational base to enhance patient knowledge base
4. The above three steps will be repeated with each participant

C. Mid-study Assessment (Day 30)

1. Number of patients enrolled in study will be tabulated
2. Results of patient questionnaire will be coded
3. Assessment will be done of practicum schedule for completion within two months
4. Suggestions if needed will be tabulated and adjustment to study made to ensure completion within time frame set

D. Project completion (Day 60)

1. Project information will be gathered and coded
2. RN post Professional Nurse Task Survey will be completed and results tabulated (Appendix E:63, questions 1-10)
3. Practicum evaluation will be done

Appendix J

Patient Questionnaire
Percent of Correct Answers
Initial Compared With Second Session

Appendix J

Patient Questionnaire
Percent of Correct Answers
Initial Compared With Second Session

Client	VTT Shown	% Scored	Ques. 6 Allow-ance	Retest %	Ques. 6 Allow-ance
A	1	100	N/A	N/A	N/A
B	2	70	80	N/A	N/A
C	3	80	90	90	100
D	2	70	N/A	100	N/A
E	1 & 2	100	N/A	100	N/A
F	2	80	90	N/A	N/A
G	2	70	80	60	70
H	2	70	N/A	60	70

Appendix K

Professional Nurse Task Survey
A comparison of Time Spent Teaching Chemotherapy
With and Without the VTT

Questionnaire 1 Without the VTT			
Nurse	Time Spent (minutes)	Adequacy	Patient Understand
A	15	NO	YES
B	15	NO	YES
C	25	NO	YES
D	20	NO	YES
E	15	NO	YES & NO
F	19	NO	YES
G	+ 25	YES	YES
H	25	YES	YES
I	20	NO	YES
Ave. Time	18.8		

Questionnaire 2 With the VTT			
Nurse	Time Spent (minutes)	Adequacy	Tape Help
A	N/A	N/A	N/A
B	N/A	N/A	N/A
C	N/A	N/A	N/A
D	N/A	N/A	N/A
E	20	YES	YES
F	25	NO	YES
G	15	YES	YES
H	20	YES	YES
I	20	YES	YES
Ave. Time	20		